

How to change: Nissan Leaf ZE0 front suspension strut – replacement guide

 VIDEO TUTORIAL

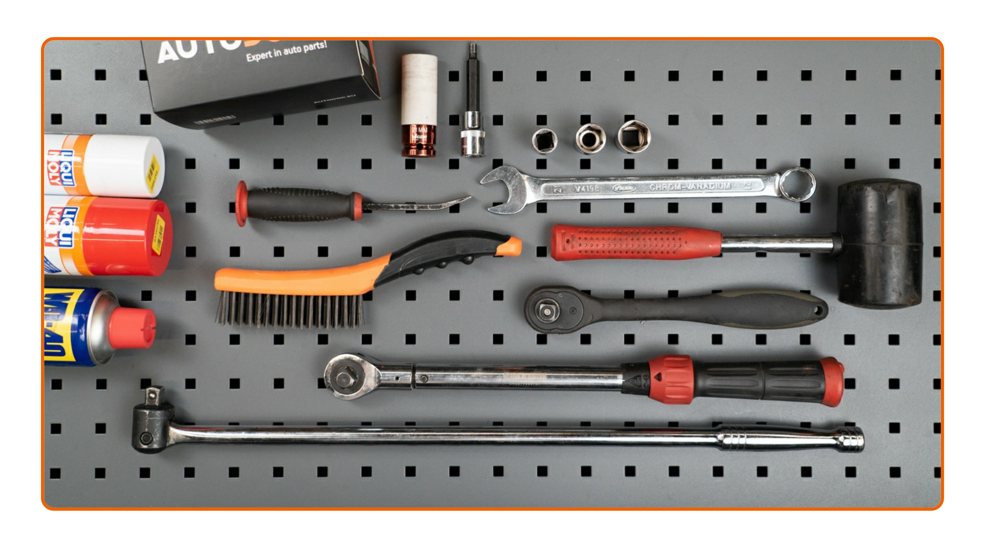
Important!

This replacement procedure can be used for:
NISSAN LEAF (ZE0) Electric

The steps may slightly vary depending on the car design.



REPLACEMENT: SUSPENSION STRUT – NISSAN LEAF ZE0. TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #21
- Drive socket # 13
- Drive socket # 18
- Drive socket # 21
- HEX bit no.H6.
- Wheel impact socket #21
- Ratchet wrench
- Torque wrench
- Tap wrench
- Crow bar
- Rubber mallet
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock



Replacement: suspension strut – Nissan Leaf ZE0. Tip from AUTODOC:

- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- All work should be done with the engine stopped.

REPLACEMENT: SUSPENSION STRUT – NISSAN LEAF ZE0. TAKE THE FOLLOWING STEPS:

1



Open the bonnet.

2



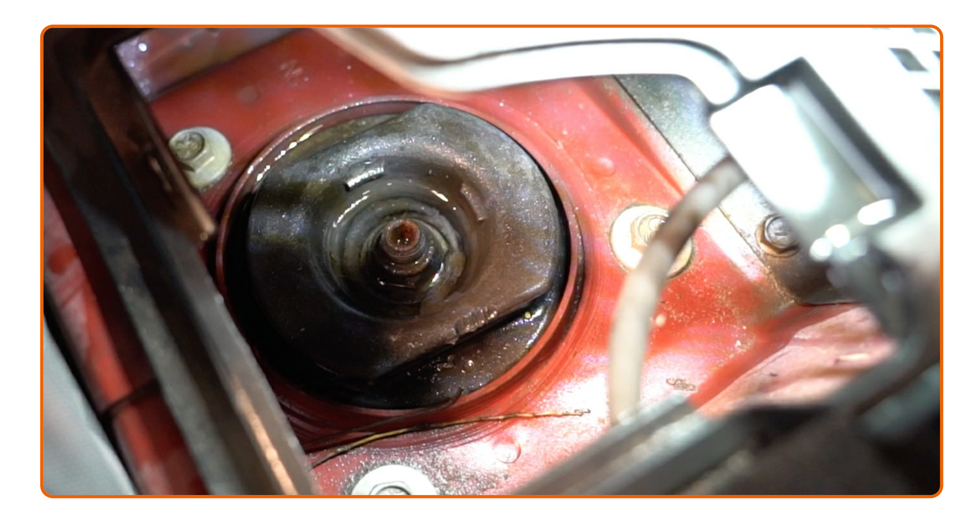
Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

3



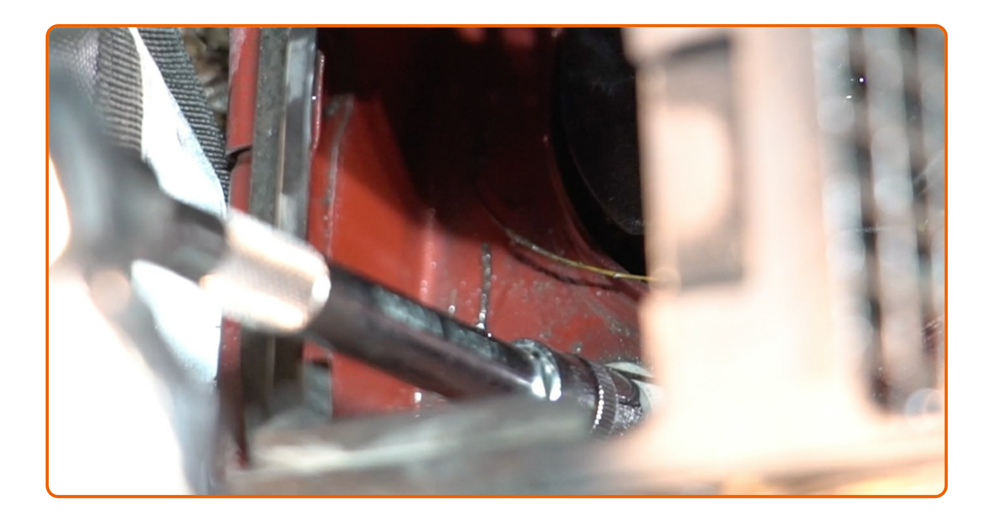
Raise up and remove the cowl grille.

4



Clean the fasteners of the shock strut upper mount. Use WD-40 spray.

5



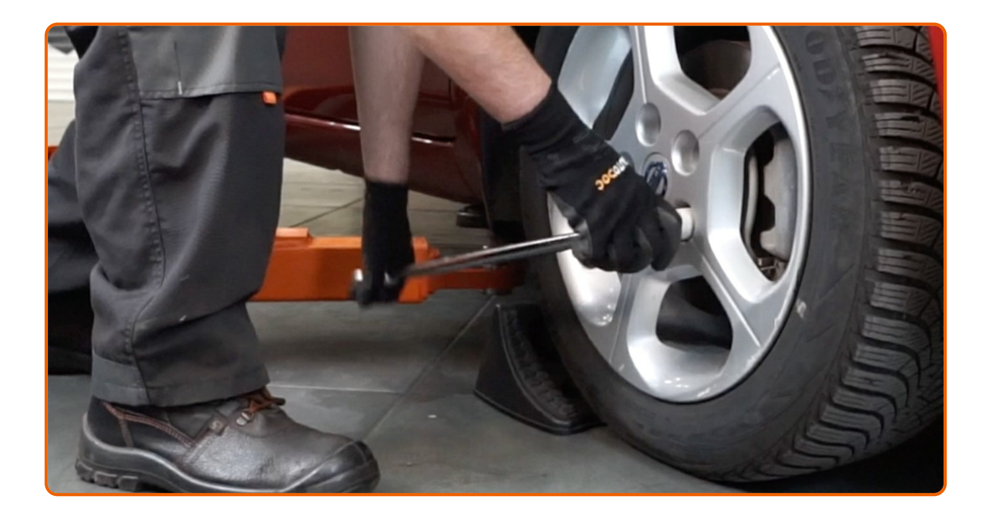
Loosen the upper fastener of the shock strut mount. Use a drive socket #13. Use a ratchet wrench.

6



Secure the wheels with chocks.

7



Loosen the wheel mounting bolts. Use wheel impact socket #21.

8



Raise the front of the car and secure on supports.

9



Unscrew the wheel bolts.

AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. Nissan Leaf ZE0

10



Remove the wheel.

11



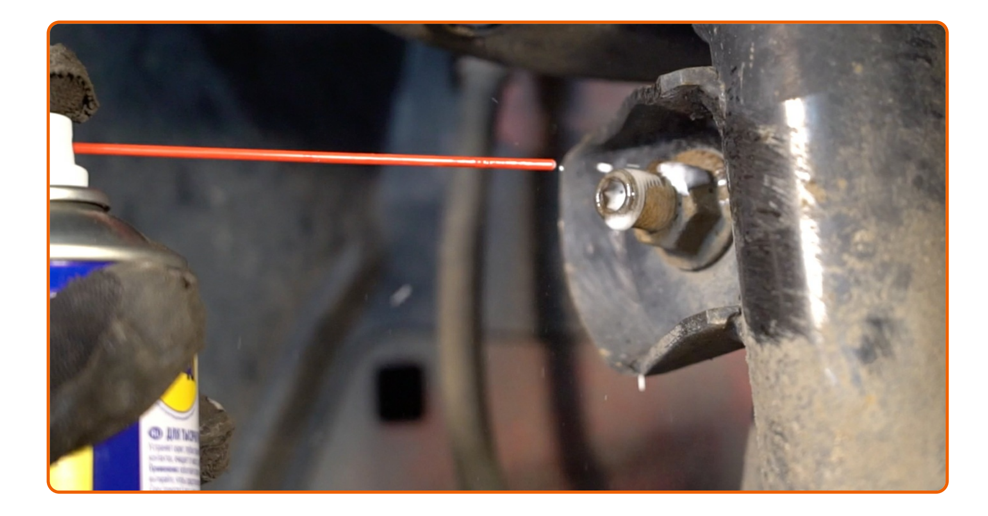
Remove the brake hose retaining clip.

12



Disconnect the wiring and the brake hose from the bracket on the shock strut. Use a crowbar.

13



Clean the fasteners connecting the stabiliser link to the shock strut, and those connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

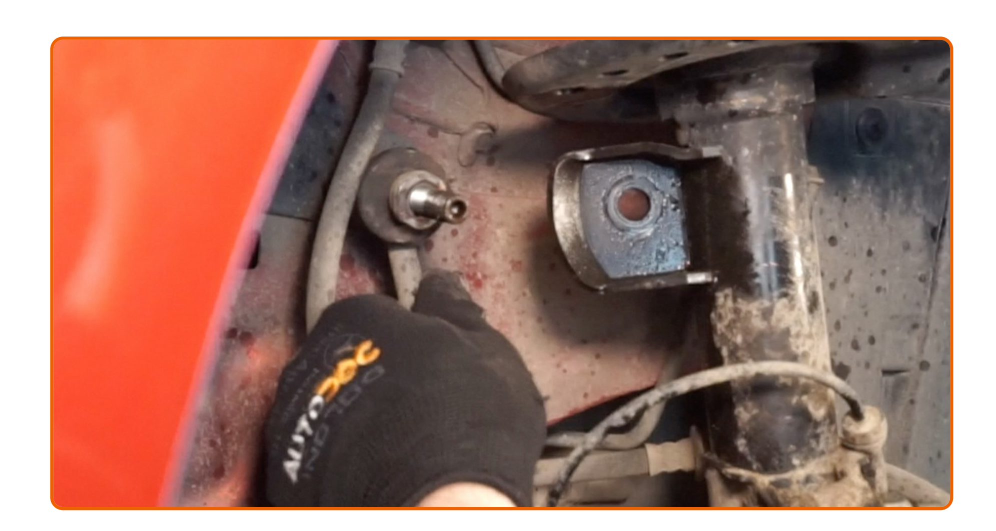


14



Unscrew the nut and remove the stabilizer rod from the shock strut. Use a drive socket #18.

15



Remove the stabilizer rod.

16



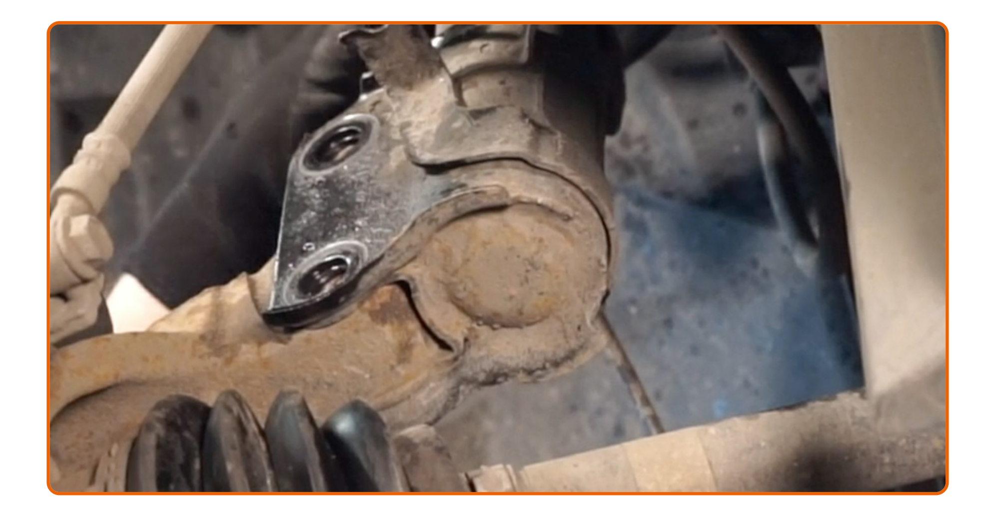
Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a tap wrench.

17



Prop up the steering knuckle. Use a hydraulic transmission jack.

18



Remove the fastening bolts.

19



Disconnect the steering knuckle from the shock absorber strut.

20

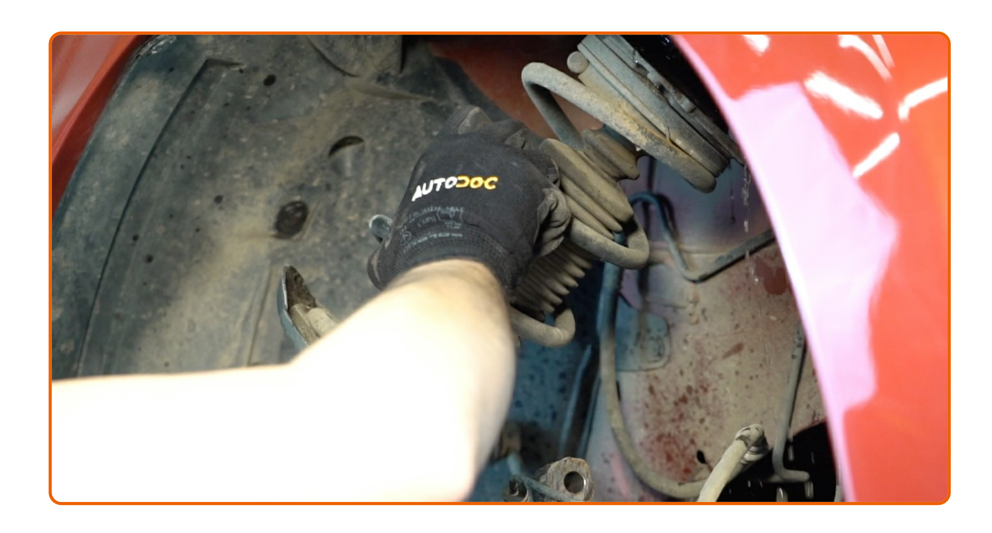


Unscrew the top fastening of the shock strut mount. Use a drive socket #13.

Replacement: suspension strut – Nissan Leaf ZE0. Tip:

- To avoid injuries, hold the shock strut when undoing the fastening bolts.

21



Remove the suspension strut.

22



Set the shock absorber strut on the spring compressor tool.

Replacement: suspension strut – Nissan Leaf ZE0. AUTODOC experts recommend:

- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

23



Compress the spring.

24



Treat the shock strut rod. Use a wire brush. Use WD-40 spray.

25



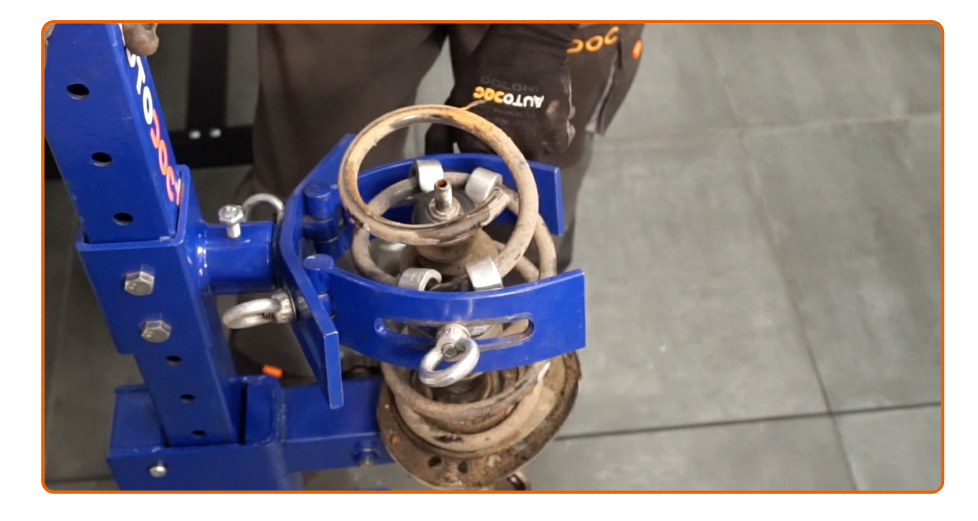
Remove the strut piston rod nut. Use HEX No.H6. Use a drive socket #18. Use a ratchet wrench.

26



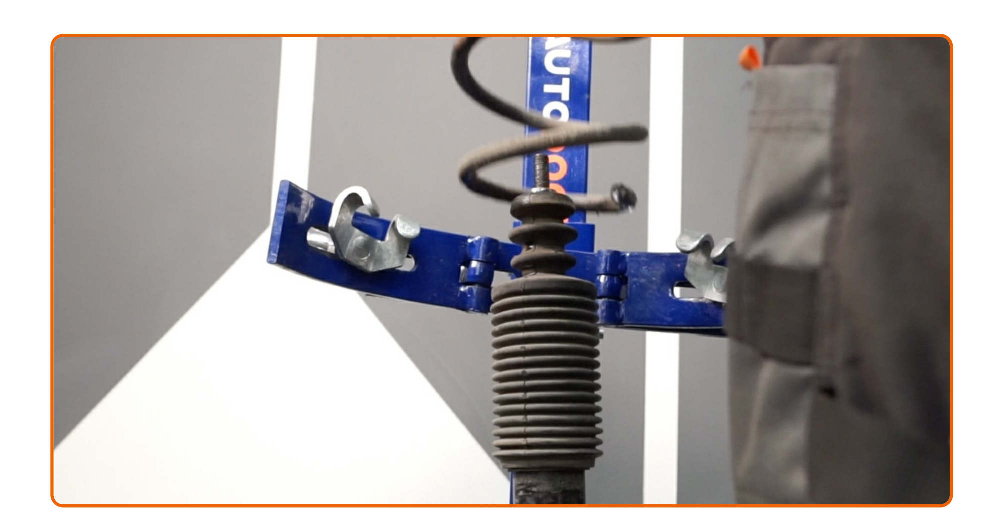
Remove the top strut mount.

27



Release the coil spring.

28



Remove the spring.

29



Remove the shock absorber dust cap and the bump stop.

AUTODOC recommends:

- Replacement: suspension strut – Nissan Leaf ZE0. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

30



Remove the old shock absorber from the hydraulic coil spring compressor.



Replacement: suspension strut – Nissan Leaf ZE0. Tip from AUTODOC:

- Before installing a new shock absorber you should pump it manually 3-5 times.

31



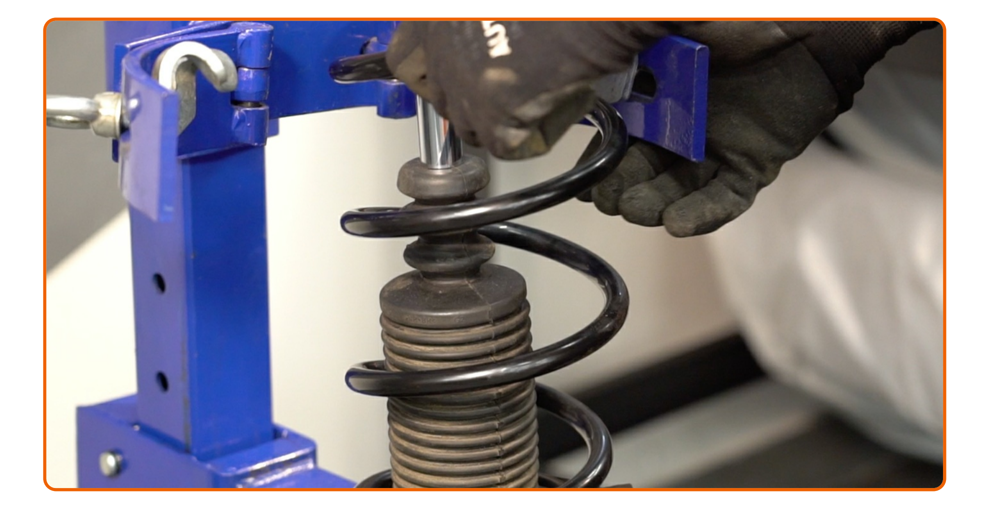
Install the new shock absorber on the hydraulic coil spring compressor.

32



Install the dust sleeve and the bump stop on the new shock absorber.

33



Install the spring on the shock absorber.

34



Compress the spring.

35



Install the upper strut mount and the strut mount bearing.

36

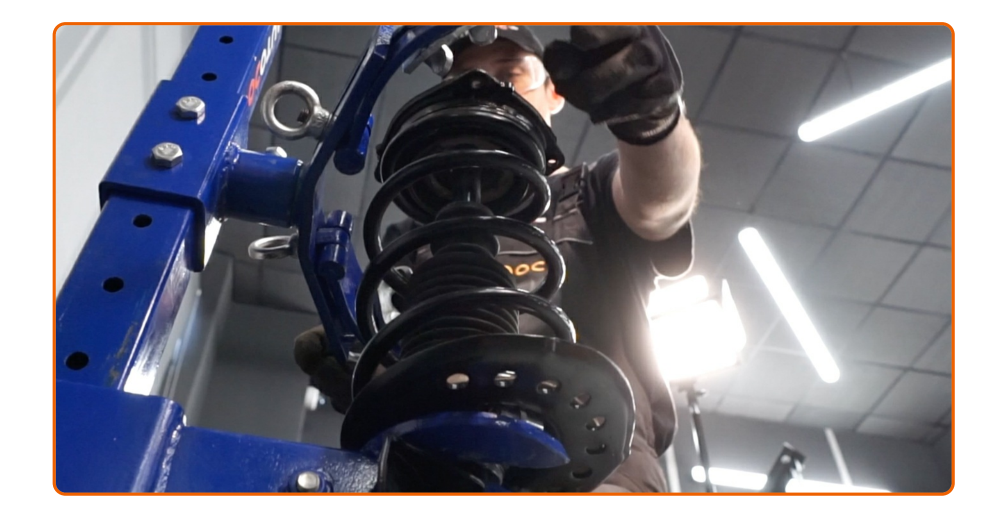


Tighten the shock strut piston rod nut. Use a drive socket #18. Use HEX No.H6. Use a torque wrench. Tighten it to 65 Nm torque.

Replacement: suspension strut – Nissan Leaf ZE0. Professionals recommend:

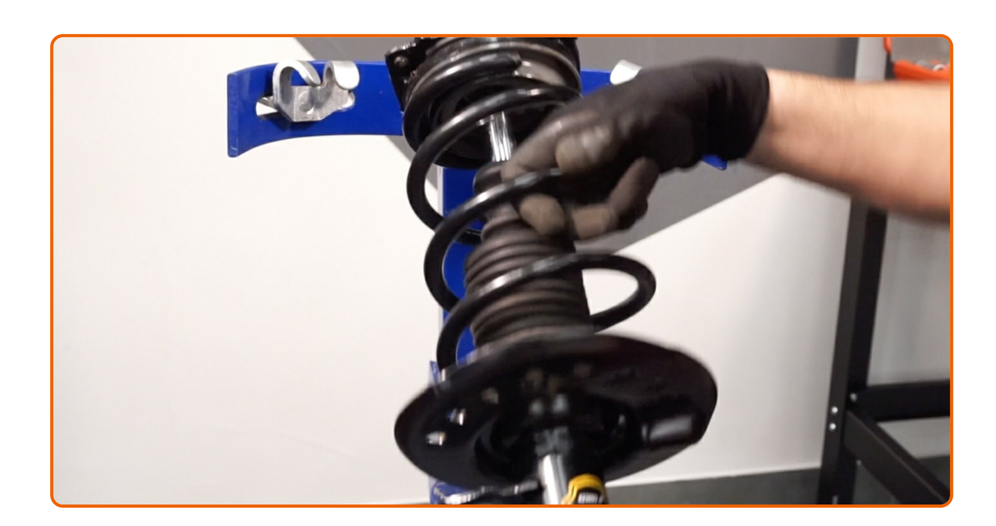
- Check to make sure the spring is positioned correctly. Avoid its misalignment.

37



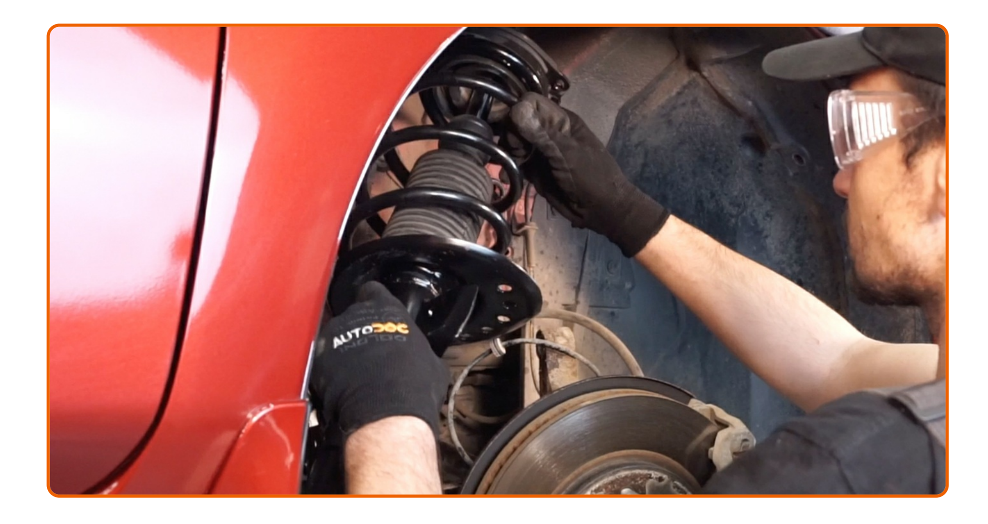
Decompress the spring.

38



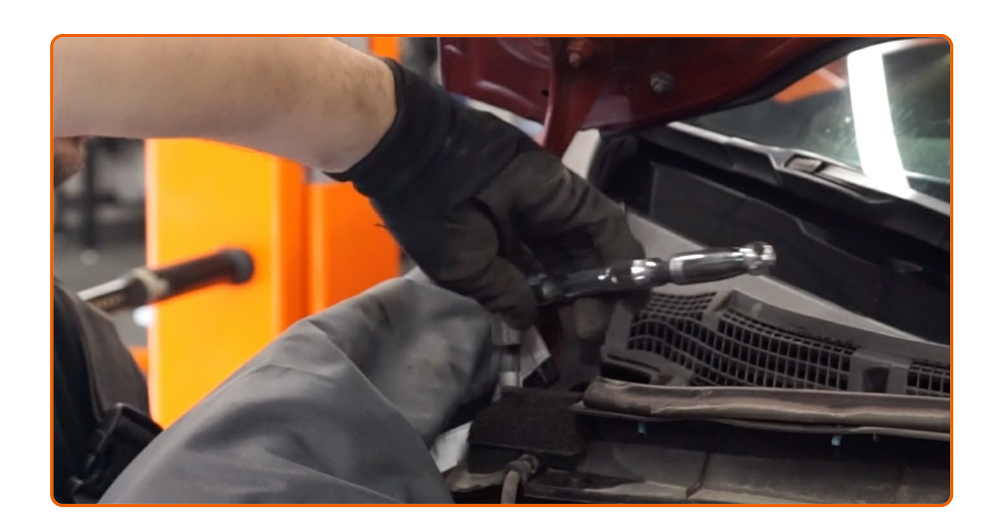
Remove the assembled shock strut.

39



Install the shock strut into the wheel arch.

40



Screw the top fastening of the shock strut mount. Do not tighten it.

AUTODOC recommends:

- Nissan Leaf ZE0 – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

41



Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.

42



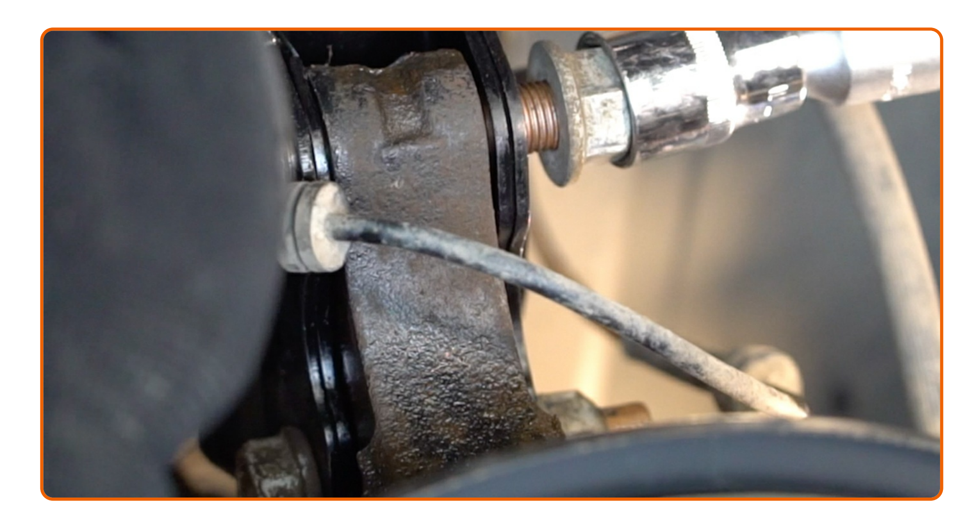
Fix the shock absorber strut on the steering knuckle.

43



Install the fastening bolts.

44



Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #21. Use a combination spanner #21.

45

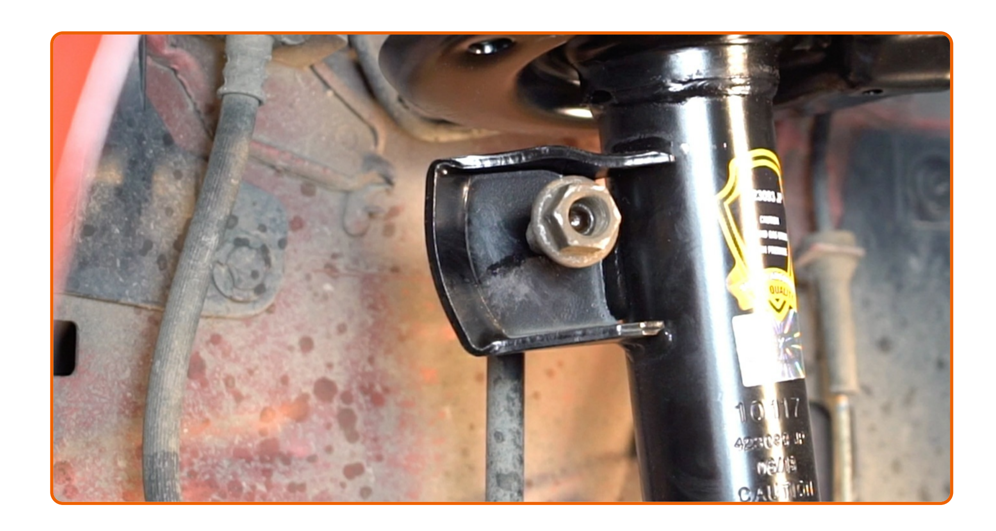


Remove the support from under the steering knuckle.

AUTODOC recommends:

- Replacement: suspension strut – Nissan Leaf ZE0. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

46



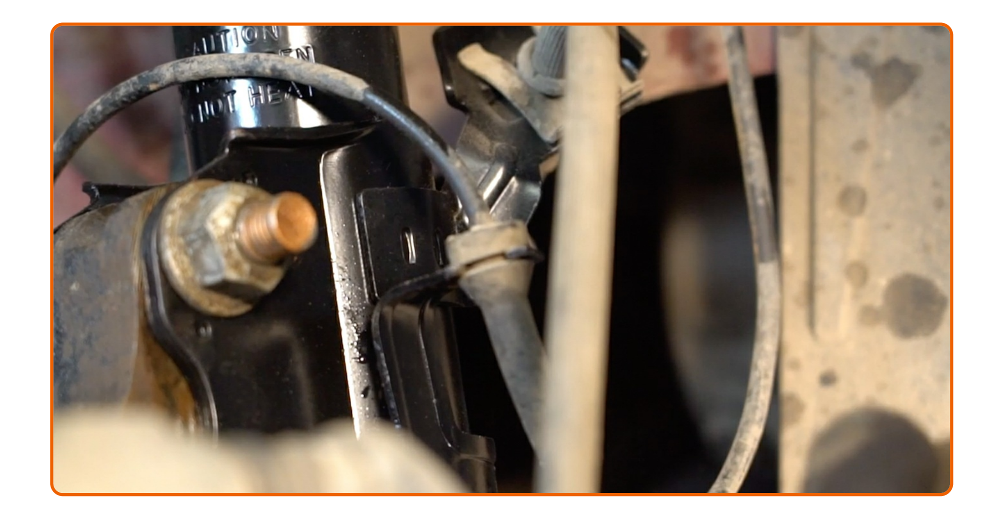
Install the transverse stabilizer link. Use a drive socket #18.

47



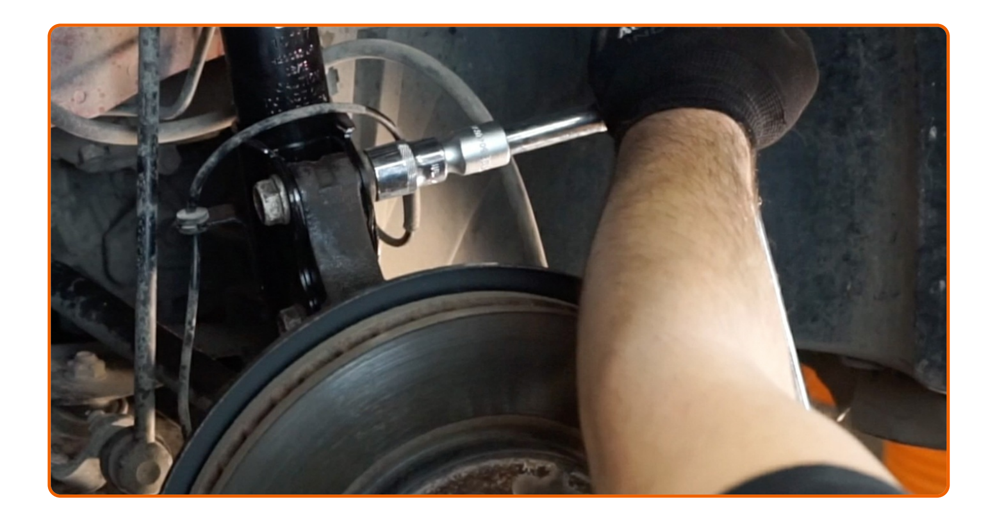
Fasten the brake hose on the strut. Connect the fastener of the ABS sensor cable to the shock absorber strut.

48



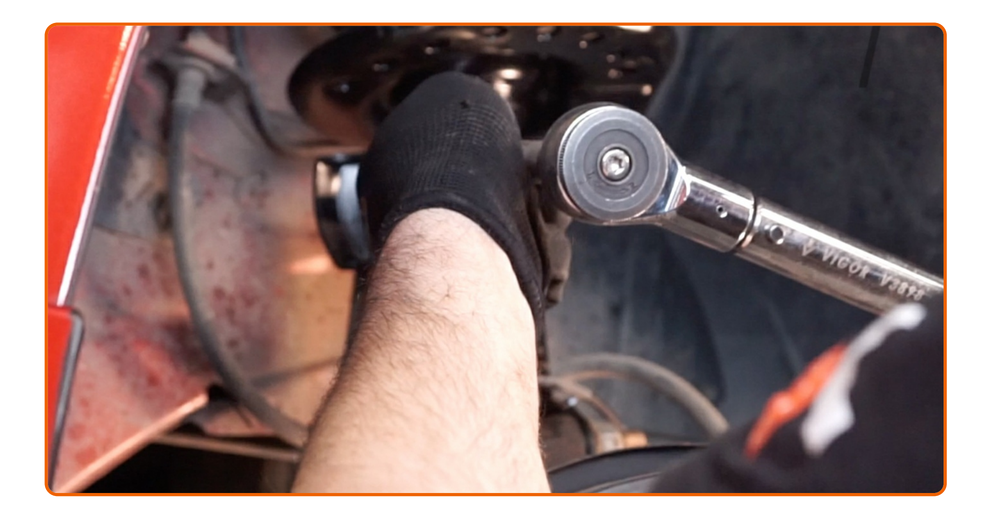
Install the brake hose retaining clip. Use a rubber mallet.

49



Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a torque wrench. Tighten it to 110 Nm torque.

50



Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #18. Use a torque wrench. Tighten it to 65 Nm torque.

51



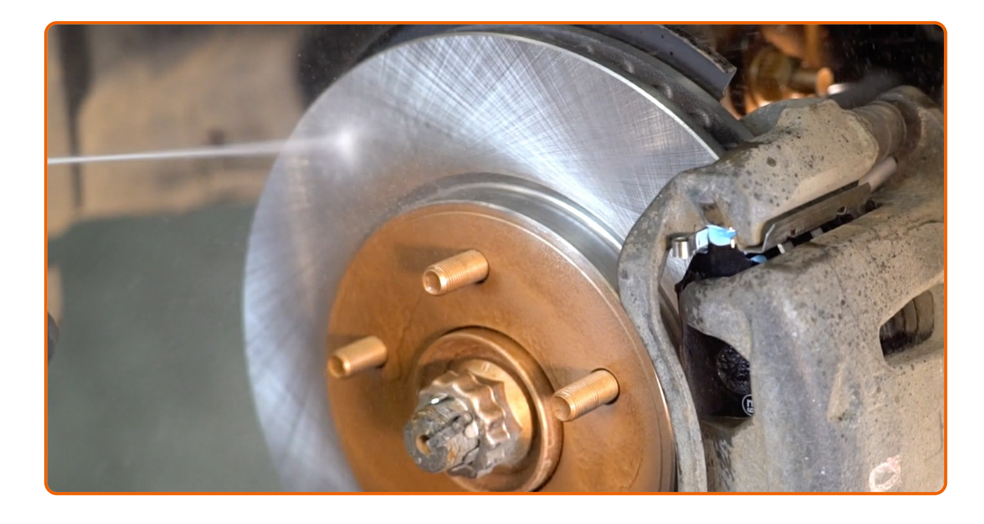
Treat the shock strut fasteners. Use copper grease.

52



Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

53

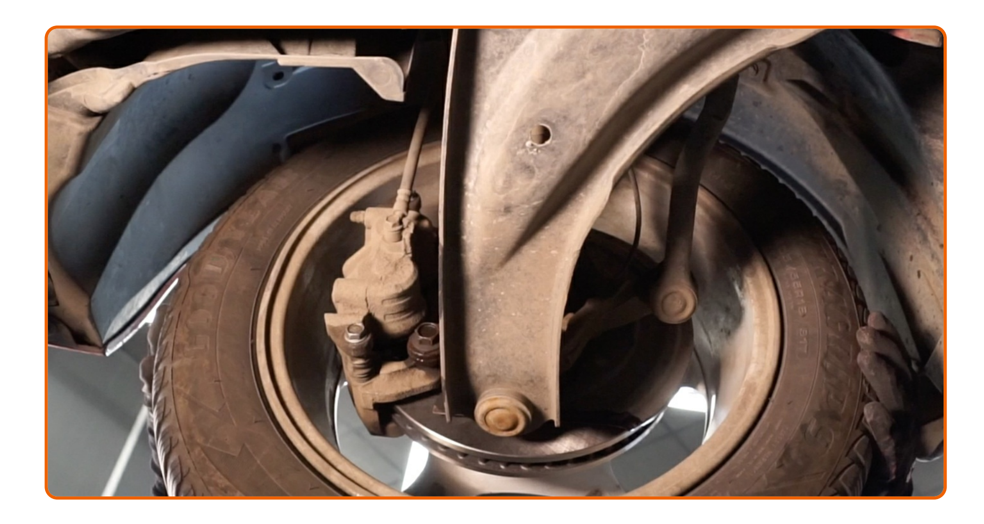


Clean the brake disk surface. Use a brake cleaner.

Replacement: suspension strut – Nissan Leaf ZE0. Tip from AUTODOC experts:

- After applying the spray, wait a few minutes.

54



Install the wheel.

AUTODOC recommends:

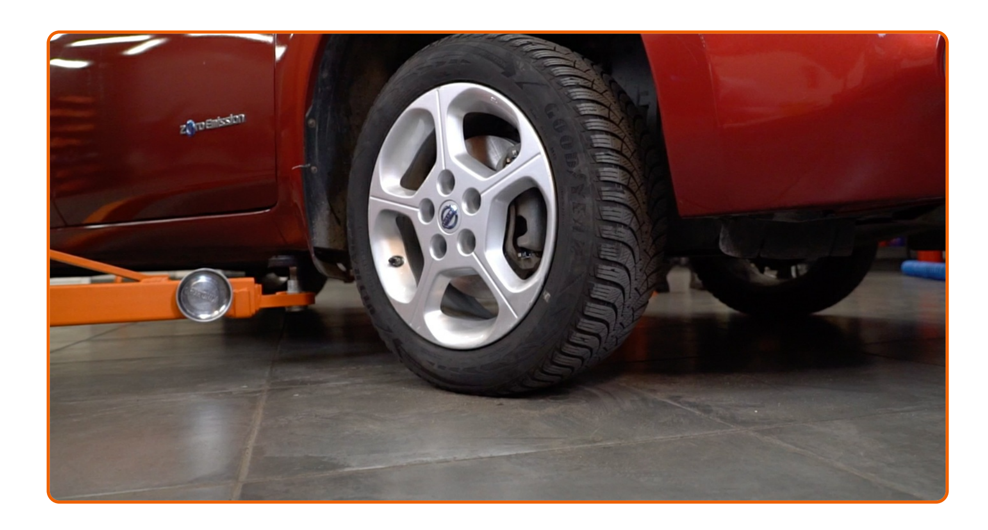
- Important! Hold the wheel while screwing in the fastening bolts. Nissan Leaf ZE0

55



Screw in the wheel bolts. Use wheel impact socket #21.

56



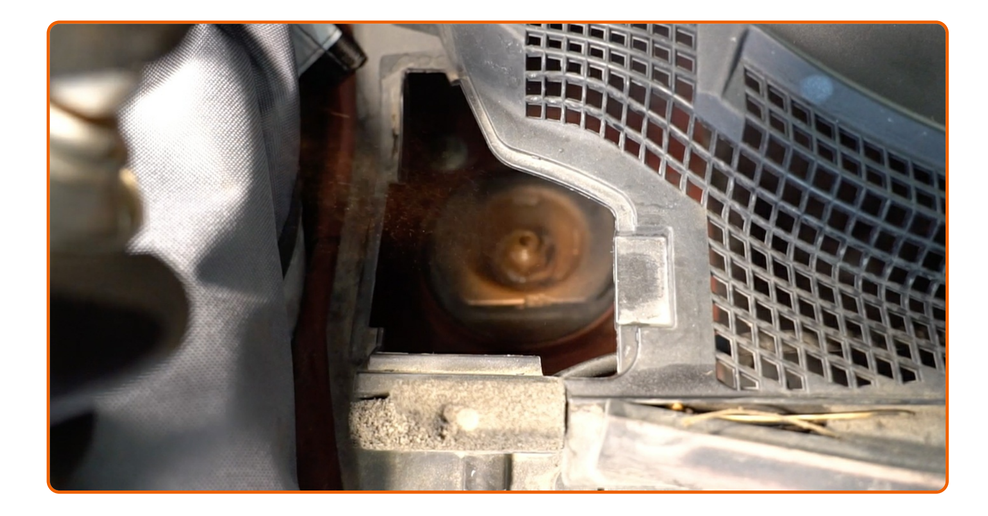
Lower the car.

57



Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 35 nm torque.

58



Treat the shock strut fasteners. Use copper grease.



59



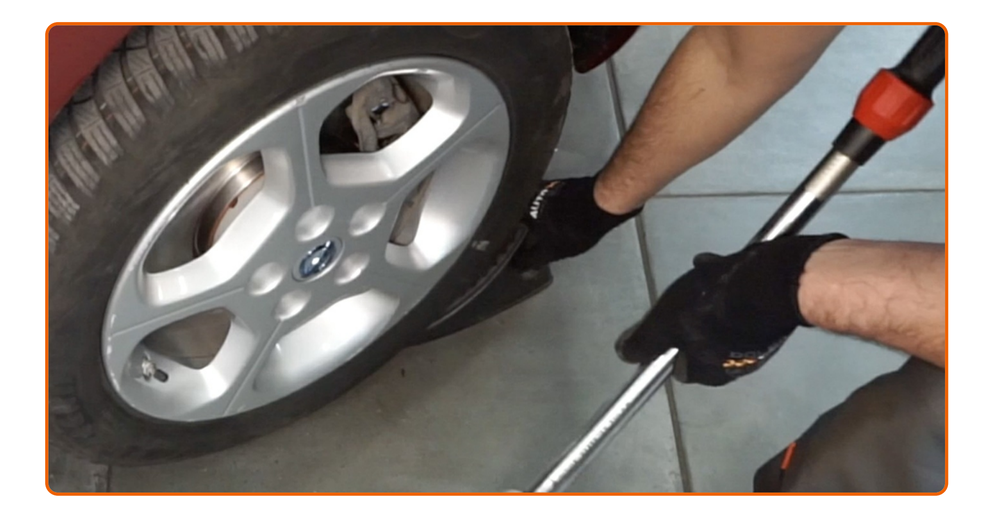
Install and secure the cowl grille.

60



Tighten the wheel bolts using a criss-cross pattern. Use a torque wrench. Tighten it to 120 Nm torque.

61



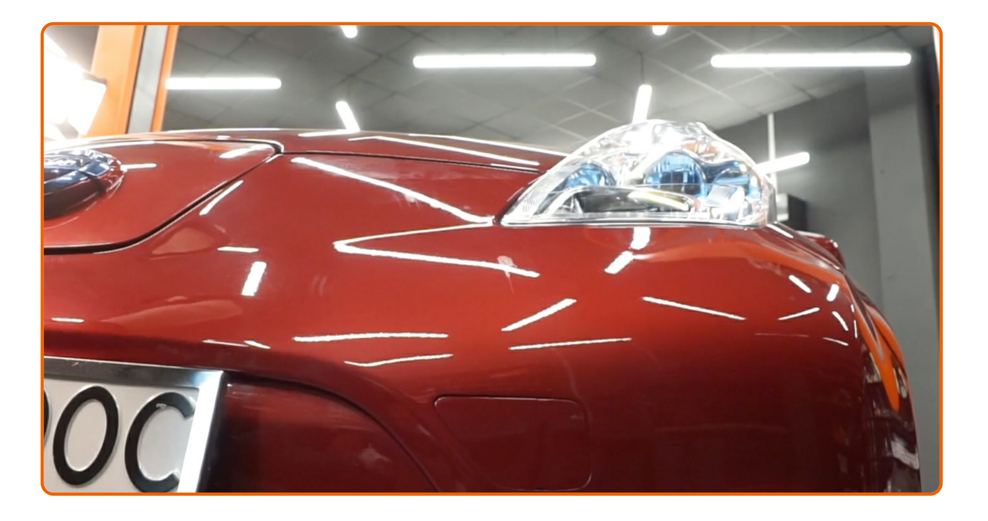
Remove the jacks and chocks.

62



Remove the fender protection cover.

63



Close the hood.

DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO



BECOME A MEMBER OF AUTODOC CLUB!

AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

AUTODOC MOBILE APP: GREAT DEALS AND CONVENIENT SHOPPING



A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR










CHOOSE CAR PARTS FOR NISSAN LEAF ZE0
LEAF


SHOCK ABSORBERS FOR NISSAN: BUY NOW
NISSAN



SHOCK ABSORBERS FOR NISSAN LEAF ZE0: THE BEST DEALS & OFFERS



ⓘ Disclaimer:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AutoDoc shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AutoDoc shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AutoDoc shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AutoDoc strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.